

BoxCast Settings for Foveo

Recommended live streaming settings for Foveo

Purpose: This guide gives the recommended settings for using this tool with Foveo live streaming. The goal is a stable input for Foveo and Cloudflare.

1. Recommended settings

Setting	Recommended value	Notes
Protocol	RTMP or RTMPS if the client supports it	Use the Foveo server URL and the Foveo camera stream key. Do not stream to the software vendor platform unless it is only used as a relay.
Video codec	H.264 AVC	Do not use H.265 HEVC over RTMP. It is not safe for this flow.
Audio codec	AAC LC	48 kHz stereo at 128 Kbps is the safe target.
Resolution	1280 x 720	Use 1080p only after a stable test with enough upload bandwidth. Avoid 4K.
Frame rate	30 fps	Avoid 60 fps unless there is a strong reason and the network is proven stable.
Rate control	CBR	If the tool only has Auto or VBR then set a ceiling and test with Foveo preflight before the event.
Video bitrate	3000 Kbps for 720p	Use 2000 to 2500 Kbps on weak connections. Use 4500 to 6000 Kbps for 1080p only if stable.
Keyframe interval	2 seconds	Use a fixed value. Do not use Auto or Variable. Use 4 seconds only if the customer still sees buffering.
Reconnect	Enabled	Retry every 2 to 5 seconds. Use many attempts or unlimited reconnect.
Network	Wired Ethernet	Wi-Fi and cellular can work but they are common causes of short disconnects.
Target video bitrate	3000 Kbps ceiling	BoxCast may still regulate bitrate up and down depending on network conditions.
Target audio bitrate	128 Kbps	BoxCast documentation says 128k is best for audio.

2. Setup steps

1. Confirm whether the customer is using a BoxCast encoder, BoxCast Producer, or the BoxCast cloud platform.
2. If the device can push to a custom RTMP destination, enter the Foveo server URL and stream key.
3. Use 1280 x 720 maximum video resolution.
4. Use 30 fps unless the event has a tested reason for higher frame rate.
5. Set target video bitrate to 3000 Kbps if the setting is available.
6. Set target audio bitrate to 128 Kbps if the setting is available.
7. Use AAC audio and H.264 video where the device exposes codec settings.
8. Start the encoder before the event and confirm Foveo receives publish state.
9. Watch the BoxCast diagnostic page for bitrate too high, transcode delayed, discontinuity, or streaming interrupted messages.

3. Pre-event test

10. Start the encoder at least 10 minutes before the event.
11. Open the Foveo admin or director page and confirm that the camera is publishing.
12. Run the Foveo camera quality check.
13. Confirm that bitrate is close to the selected value.
14. Confirm that GOP or keyframe interval is around 2 seconds.
15. Confirm that FPS is 30 and resolution is 1280 x 720.
16. Confirm that audio is detected as AAC with 48 kHz when possible.
17. Start the broadcast only after the test is stable.

4. What to do if it disconnects

- Lower video bitrate to 2500 Kbps and test again.
- If buffering continues, test a fixed 4 second keyframe interval.
- Switch from Wi-Fi to wired Ethernet.
- Restart the encoder and the router only if the issue continues.
- Check the encoder log for dropped frames, reconnect messages, or CPU overload.
- Send screenshots of the output settings to the Foveo support team.

5. Important notes

- BoxCast tools may adapt bitrate automatically. This can be good for BoxCast but may make the Foveo input less predictable.
- If BoxCast is being used as an extra relay between the camera and Foveo, test direct RTMP to Foveo as a comparison.